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10/526,751	11/14/2005	Thorsten Pferdekaemper	07781.0221-00	6920
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EXAMINER				
SHECHTMAN, CHERYL MARIA				
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2169				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/526,751

**Applicant(s)**

PFERDEKAEEMPER ET AL.

**Examiner**

CHERYL M. SHECHTMAN

**Art Unit**

2169

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 and 14-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 14-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB-083)
- Paper No(s)/Mail Date 8/21/08
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This communication is in response to Amendment filed August 21, 2008. Claims 1-12 and 14-21 are pending. Claims 1, 4-6, 11, 12 and 16-18 are amended. Claim 13 is cancelled.

### ***Response to Arguments***

2. Referring to the 35 USC 112 second paragraph rejection of claims 1-12 and 14-21, Applicant's amendments to the claims are acknowledged. As such, the 35 USC 112 second paragraph rejection of the claims is withdrawn.
3. Referring to the 35 USC 101 rejection of claims 1-10, 12 and 14-21, Applicant's amendments to the claims are acknowledged. As such, the 35 USC 101 rejection of the claims is withdrawn.
4. Applicant's arguments with respect to claims 1-3, 5-9, 11, 12, 14, 15 and 17-21 have been considered but are moot in view of the new ground(s) of rejection.
5. Applicant's arguments filed with respect to claim 1 have been fully considered but they are not persuasive.

Referring to claim 1, Applicant argues that Furlani fails to teach that the ID is stored if the data object is accessed. However, Examiner respectfully disagrees. Furlani teaches that the Group Lock data Object 303 is created by the lockRefCreator programmed method 315 in the Reference Lock Object 301 when an independent object in the group becomes interrelated to another object (col. 8, lines 19-21). Furlani also discloses that the lockRefCreator programmed method 315 also increments and

stores the value of 'MaxLockObject ID' field 313 in the *newly created* Group Lock data Object 303 (col. 8, lines 21-25). Examiner respectfully submits that the Group Lock Object 303 must be accessed before any value can be stored in it. Furthermore Furlani teaches that the reference lock object is used to provide exclusive access to subsequently described group lock linkages and that each group in the object collection containing interrelated objects must be locked together before accessing any of the interrelated objects (col. 7, line 49 – col. 8, line 25). As such, Examiner maintains that Furlani does teach that the ID is stored if the data object is accessed.

The rejections of all other claims not addressed are also maintained for the above reasons as well as in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3, 5-9, 11, 12, 14, 15 and 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Number 6,594,683 issued to Furlani et al (hereafter Furlani), and further in view of Patent Number 7,028,287 issued to Bak et al (hereafter Bak).

Referring to claim 1, Furlani discloses a data structure tangibly embodied in a computer-readable medium, the data structure preventing access, in a computer system, to a data object having an identifier (ID) and being stored in a first storage location (Abstract; Fig 3, element 303 and 5A), the data structure comprising:

- a first lock object ('Group lock object', Fig. 3, element 303), in which the ID is stored if the data object is being accessed (*Group lock object must be accessed in order to store LockObjectID 325 pertaining to incremented MAX LockObjectID 313, the Reference Lock Object 301 is used to provide exclusive access to subsequently described group lock linkages*, col. 7, line 49 – col. 8, line 25; Fig. 3), and in which a link to a storage location of a data object is assigned to the ID ('LockObject ID' pointer, Fig. 3, element 325, col. 8, lines 15-25; col. 8, lines 35-50), and
- a second lock object ('Reference lock object', Fig. 3, element 301), in which the ID is stored ('MaxLockObject ID', Fig. 3, element 313; col. 8, lines 6-14), wherein
  - o the ID is stored in the second lock object before storing the ID in the first lock object (col. 8, lines 6-25), wherein
  - o the ID is deleted from the second lock object after storing the ID in the first lock object (Fig. 3, element 319; col. 8, lines 30-34; see Unlock function in Fig. 5A), and wherein
  - o the first lock object and the second lock object are accessible by a software application, whereby the software application is prevented from accessing the

data object if the ID is stored in the first lock object or the second lock object (Abstract; col. 2, line 59 – col. 3, line 4).

However, while Furlani discloses all of the above claimed subject matter and also discloses assigning a link to a storage location of a data object (Furlani, Fig. 3, element 325), Furlani remains silent as to assigning a link to a storage location storing a copy of a data object.

However, Bak teaches analogous art that discloses assigning a link to a storage location storing a copy of a data object (Bak, Abstract; col. 2, lines 27-34; Fig. 4, col. 5, lines 16-39).

It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify Furlani to include assigning a link to a storage location storing a copy of a data object, as taught by Bak.

The ordinary skilled artisan would have been motivated to modify Furlani per the above for the purpose of facilitating exclusive access to an instance associated with the data object by indicating through the placement of the pointer link that the instance is locked (Bak, col. 2, lines 27-34).

Referring to claim 11, the limitations of the claim are similar to those of claim 1 above and therefore claim 11 is rejected for the same reasons addressed above. In addition, claim 11 is directed to a computer system with memory means having program instructions; input means for entering data; storage means for storing data; and a

processor responsive to the program instructions (Furlani, see Fig. 1 and related portions of specification).

Referring to claim 12, the limitations of the claim repeat the respective limitations of claim 1 above in the form of a computer readable medium comprising instructions (see Furlani, Fig. 1 and related portions of specification).

Referring to claims 2 and 14, the combination of Furlani/Bak discloses that the link is a filename or a link to a file (Furlani, Fig. 3; filestorage mechanism, col. 5, line 66 - col. 6, line 10).

Referring to claims 3 and 15, the combination of Furlani/Bak discloses that the first lock object is a file stored in a nonvolatile storage means (Furlani, 'Cd-ROM', Fig. 1, element 115; col. 5, line 66 – col. 6, line 10).

Referring to claims 5 and 17, the combination of Furlani/Bak discloses that the data object comprises one or more fields of one or more tables and wherein the ID comprises one or more key fields of the one or more tables (Furlani, Fig. 3, element 307).

Referring to claims 6 and 18, the combination of Furlani/Bak discloses that the first and second lock objects are created by a data moving or data archiving process (Furlani, col. 5, lines 1-8; see also claim 12 of Furlani).

Referring to claims 7 and 19, the combination of Furlani/Bak discloses that the second lock object is stored in a volatile or nonvolatile storage means (Furlani, 'Cd-ROM', Fig. 1, element 115; col. 5, line 66 – col. 6, line 10).

Referring to claims 8 and 20, the combination of Furlani/Bak discloses that the second lock object is a data array (Furlani, see Fig. 3, element 301).

Referring to claims 9 and 21, the combination of Furlani/Bak discloses that the data array is one dimensional (Furlani, see Fig. 3, element 301).

7. Claims 4 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Furlani in view of Bak, as applied to claims 1 and 11 above, and further in view of US Patent Number 5,566,319 issued to Lenz.

Referring to claims 4 and 16, the combination of Furlani/Bak discloses all of the above claimed subject matter, however remains silent as to:

- the first lock object comprising a table, having a column for the ID and a column for the link of the ID to a storage location.

However, Lenz teaches analogous art discloses analogous art that includes:



- a first lock object comprising a table, having a column for an ID and a column for the link of the ID to a storage location ('Lock File' 3-1, Fig. 3).

It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the combination of Furlani/Bak to include a first lock object comprising a table, having a column for an ID and a column for the link of the ID to a storage location, as taught by Lenz.

The ordinary skilled artisan would have been motivated to modify the combination of Furlani/Bak per the above for the purpose of enabling rapid verification of optimistic assumption for lock file control fields (Lenz, col. 2, lines 49-67).

8. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Furlani in view of Bak, as applied to claim 1 above, and further in view of Applicant's admitted prior art (hereafter AAPA).

Referring to claim 10, the combination of Furlani/Bak discloses all of the above claimed subject matter, however remains silent as to using data structures in enterprise resource planning software.

However, AAPA teaches the use of data structures in enterprise resource planning software (ERP) applications (para. 4-5 of the instant specification).

It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the combination of Furlani/Bak to include the use of data structures in enterprise resource planning software (ERP) applications, as admitted by Applicant.

The ordinary skilled artisan would have been motivated to modify the combination of Furlani/Bak per the above for the purpose of managing company information of enterprises of various kinds in any field of technology by means of automatic data processing systems (para. 4 of the instant specification).

### ***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheryl M Shechtman who can be reached on (571) 272-4018. The examiner can normally be reached on 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trujillo can be reached on (571) 272-3677. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Cheryl M Shechtman/

Examiner, Art Unit 2169

/Wilson Lee/

Primary Examiner, Art Unit 2163

December 4, 2008